PENDING CLAIMS

1-39. (canceled)

2.40. (previously amended) The vaccine of claim 41 comprising P. haemolytica ATCC 55518.

Pasteurella haemolytica infection, comprising: an isolated Pasteurella haemolytica bacterium which comprises a mutation in an aroA gene, wherein the mutation attenuates the bacterium.

3 42. (previously added) The vaccine of claim 41 containing an adjuvant.

(previously amended) The vaccine of claim A which is formulated for a route of administration selected from the group consisting of intranasal, intratracheal, intramuscular, and intravenous routes of administration.

44. (previously amended) The vaccine of claim 41 which is formulated for subcutaneous injection.

45-66. (canceled)